

and beautiful forms and structure deserve." The importance, however, of illustrating this tribe will be evident when it is stated that almost every species of quadruped and bird has its peculiar parasite, and many of them are infested by two, three, or even five distinct species—that these offer so great a diversity of colour, form, and habits, that none but an entomologist would recognise the family to which they belong from any analogy they bear to the more familiar examples. Notwithstanding the number of individuals continually offering themselves to the observer of nature, it is no less strange than true there is no one book to which he can refer for the purpose of naming them. It must not, however, be inferred from this that the subject has been wholly neglected by men of science, for so early as 1688 forty species were figured and described by Redi, since which we find the illustrious names of Linnæus, Geoffroy, De Geer, Scopoli, Schranke, Fabricius, Albin, Latreille, Hermann, Olfers, Lyonet, Panzer, Leach, Nitzsch, and Children, assisting to elucidate this group. But as the labours of many of these naturalists are difficult to come at, and several when procured give little more than a catalogue of names, without figures or reference to description, few can avail themselves of the benefit they offer. The work will form a concise concentration of the information already possessed, with original figures, drawn and coloured after nature, and will undoubtedly be a valuable addition to the entomological literature of this country.

Mr. Denny will feel greatly obliged by the transmission of examples of the different species of *Pediculidæ* and *Nirmidæ* from the following quadrupeds and birds:—

Fox. Otter. Polecat. Weasel. Squirrel. Hedgehog. Mouse. Rat. Shrews. Mole. Dormouse. Guinea Pig. Hare. Seal. Wild Cat. Bats. Pine Martin. Goat.

Kite. Goshawk. Kestrel. Eagle. Owl. Little Owl. Roller. Nutcracker. Creeper. Wren. Long-tailed Titmouse. Goldfinch. Pine Grosbeak. Redstart. Redbreast. Ringouzel. Dipper. Pratincole. Bittern. Crane. Night Heron. Ibis. Bustard. Little Bustard. Northern Diver. Black Stork. Quail. Hawfinch.

PROCEEDINGS OF LEARNED SOCIETIES.

BOTANICAL SOCIETY OF EDINBURGH.

April 12th, 1838.—Robert Maughan, Esq., Member of the Wernerian Society, in the Chair.

Mr. Forbes read a paper on the specific claims of *Primula acaulis*,

veris, and *elatior*, in which he contended that instead of three, these form but two species, viz. *P. acaulis* and *veris*; and that *P. elatior* is not only not a hybrid, but a *non-existence*, inasmuch as after particular investigation he had not been able to find any plant at all agreeing with the characters of *P. elatior* as given by Jacquin, who was the founder of the species.

Professor Christison presented some observations on the preservation of fruits and other botanical specimens in the moist state, and remarked that after numerous experiments made for a series of years with various fluids, he had found none which served so well to preserve both the consistence and colour of fruits, leaves and flowers, as a concentrated solution of common salt. Numerous specimens were exhibited which had been preserved in this way for one, two, three, and five years, among which were sprigs with leaves and ripe and unripe fruit of *Myristica moschata*, *Xanthochymus pictorius*, *Garcinia Cambogia*, *G. Mangostana*, *Hebradendron cambogioides*, *Alpinia Cardamomum*, *Mangifera indica*, *Ricinus communis*, *Flacourtia inermis*, &c. In the greater part of these the green tint of the leaves and the peculiar colour of the fruit seemed to have undergone little alteration. When the fruit however is very pulpy, as in *Solanum Lycopersicum*, or lemons and oranges, a solution of salt is comparatively inapplicable, because the fruit shrivels by exosmosis of its fluids, and diluted pyro-ligneous acetic acid is found to be preferable.

Mr. Hamilton read a paper on the Gardens of the Ancient Hebrews, treating in succession, 1st. Of grounds for the cultivation of the vine, the olive, or any single species of fruit tree; 2nd. Of orchards for rearing fruit trees in general; 3rd. Of kitchen gardens; 4th. Of flower gardens. The paper concluded with assigning the reasons on account of which gardens were excluded from the walled cities of Judah, and with mentioning certain restrictions on the horticultural taste and skill of the people, occasioned by the interference of their Doctors and Rabbis.

May 10th.—Professor Graham, President, in the Chair.

Mr. Macaulay read the first part of a paper "On the effects of Vegetation on the Atmosphere," in which the influence of the vegetable kingdom on the *composition* of the atmosphere was treated. After detailing various experiments tending to show that different natural families may differ in their effects on the atmosphere, and giving an abstract of the researches of Priestley, Senebier, Berthollet, Ellis, Saussure, Burnet, Morren, Daubeny, and others, Mr. Macaulay concluded by presenting a series of propositions which appeared to him to contain the present state of our knowledge on this subject.

Dr. Graham read a description of *Catasetum discolor*, var. *luteo-aurantiacum*, and offered some general observations on the genus *Catasetum*.

June 14.—Dr. Balfour, V.P., in the Chair.

The Secretary stated that a letter had been received by the President from William Gibson Craig, Esq., M.P. inclosing a communication from Lord John Russell, intimating that Her Majesty had been graciously pleased to become Patron of the Botanical Society.

Dr. Balfour then read a paper by Wm. B. Carpenter, Esq. of Bristol, containing a general view of the function of reproduction in vegetables, in which Mr. Carpenter endeavoured to show that the reproductive system can be traced with increasing complexity, but without alteration in its essential characters, from the lowest Cryptogamic Tribe up to the most perfectly organized flowering plants.

July 12th.—Professor Graham, President, in the Chair.

It was stated by the Secretary that the Society had received an increase of 77 Members since the date of the last Annual Report in 1837, and that the total number of Members now amounted to 199, in the following proportions.

British Honorary Members	6	Non-Resident Members	63
Foreign Honorary Members	20	Foreign Members	27
Resident Members	82	Associate	1—199

Mr. Falconer read an account of a Botanical excursion to one of the islands of Hyères by Mr. Percy in the year 1836, with a list of most of the species observed.

Mr. Macaulay read some observations on several of the species of the genus *Tortula*, communicated by Mr. Robert Stark of Cirencester.

Mr. Brand read a paper containing his views on the proper mode of arranging the Society's Herbarium and forming a catalogue for reference. He proposed to divide Great Britain and Ireland, including the adjacent islands, into 42 districts, grouped according to a union of their political and natural boundaries, and he exhibited a map of the country arranged on this principle. He proposed to devote a page of the catalogue to each species, and to have printed on it the numbers and names of all the districts, with columns annexed for recording the following particulars, namely, the latitude and longitude of the centre of each district, and the county whence the specimens are obtained; the condition of the plants in the respective districts, as denoted by the marks or signs used in the Society's published catalogue; the relative situation or habitat of the specimens furnished, as whether upland, inland or from the coast; the

nature of the soil or rocks where the plants were found; the time of their first coming into flower; with a space for general observations. The principles and objects of Mr. Brand's scheme and arrangement seemed to be generally approved of, and it was referred to a Committee to consider it more fully, and to report to the Meeting in November.

The Society then adjourned till Thursday the 8th of November.

ZOOLOGICAL SOCIETY.

January 9th, 1838.—Thomas Bell, Esq., in the Chair.

Mr. Gray exhibited a new species of *Perameles*, in size and general appearance very closely agreeing with *Per. nasutus*, but peculiar for its very short white tail, and in having several indistinct broad white bands over the haunches. The species inhabits Van Diemen's Land, where it frequents gardens, and commits great havoc amongst bulbous roots, which it is said to devour with avidity. Mr. Gray proposed for it the name of *Per. Gunnii*, after its discoverer, Mr. Ronald Gunn*.

It was suggested in the course of some discussion which followed Mr. Gray's observations, that the roots upon which this species was supposed to feed, were probably attacked for the purpose of procuring such insects as might be found in them; and Mr. Owen in reference to this point alluded to a dissection of a *Perameles* made by Dr. Grant, and published in the Wernerian Transactions, in which insects were found to constitute almost the sole contents of the stomach and intestines.

A very large and beautiful Antelope, of a species hitherto entirely unknown, and which had just arrived in England under the care of Captain Alexander from the Cape, was in the room for exhibition; and the history of the circumstances under which it had been discovered, were detailed in the following letter, addressed to the Secretary, by Capt. W. C. Harris, of the Bombay Engineers.

Cape Town, South Africa, Oct. 10, 1837.

Sir,—I beg the favour of your presenting to the Zoological Society the accompanying drawing and description of an entirely new and very interesting species of Antelope, which I discovered in the course of an expedition to the interior of Africa, from which I have lately returned. A perfect specimen that I brought down has been admirably set up by Monsieur Verreaux, the French naturalist at Cape Town, and will be sent to London in the course of a few days,

* Since described in the Annals of Natural History, for April, 1838.